MATLAB Bug Fix for CERES Data Files

Workaround for CERES Products Exhibiting Vdata Error (AVG, ZAVG)

hdftool errors on HDF4 files with Vdata datasets with zero-length names

hdftool incorrectly assumed that any Vdata dataset would have a name with at least one character. However, zero-length names, while rare, are valid.
For more information, see: MATLAB bug report dealing with 0-length Vdata

Please follow the instruction exactly as mentioned for: Windows 32-bit and 64-bit machines | Mac 32-bit and 64-bit machines

for Windows Machines

Windows 32-bit Machines - tested and verified with Matlab R2008a	Windows 64-bit Machines - tested and verified with Matlab R2009a
1. Type "matlabroot" at Matlab command prompt and copy the path. ◦ This directory will be referred to as $matlabroot 2. Quit Matlab 3. Go to "$matlabroot/toolbox/matlab/imagesci" 4. Make a backup copy of the file hdf.mexw32 to hdf.mexw32.old 5. Place the new hdf.mexw32 file in the same location 6. Go to "$matlabroot/toolbox/matlab/imagesci/private" 7. Make a backup copy of the file hdfquickinfo.m to hdfquickinfo.m.old 8. Copy the new hdfquickinfo.m into the same directory 9. Restart Matlab 10. Type "rehash toolboxcache" at Matlab command prompt. **The changes are not going to be effective without doing this.** 11. Start hdftool and load the CERES HDF files	1. Type "matlabroot" at Matlab command prompt and copy the path. ◦ This directory will be referred to as $matlabroot 2. Quit Matlab 3. Go to "$matlabroot/toolbox/matlab/imagesci" 4. Make a backup copy of the file hdf.mexw64 to hdf.mexw64.old 5. Place the new hdf.mexw64 file in the same location 6. Go to "$matlabroot/toolbox/matlab/imagesci/private" 7. Make a backup copy of the file hdfquickinfo.m to hdfquickinfo.m.old 8. Copy the new hdfquickinfo.m into the same directory 9. Restart Matlab 10. Type "rehash toolboxcache" at Matlab command prompt. **The changes are not going to be effective without doing this.** 11. Start hdftool and load the CERES HDF files

for Apple Mac Machines

Mac 32-bit Machines - tested and verified with Matlab R2008b	Mac 64-bit Machines - NOT tested and verified yet
1. Type "matlabroot" at Matlab command prompt and copy the path. ◦ This directory will be referred to as $matlabroot 2. Quit Matlab 3. Go to "$matlabroot/toolbox/matlab/imagesci/private" 4. Make a backup copy of the file hdfquickinfo.m to hdfquickinfo.m.old 5. Copy the new hdfquickinfo.m file into the same directory 6. Restart Matlab 7. Type "rehash toolboxcache" at Matlab command prompt. **The changes are not going to be effective without doing this.** 8. Start hdftool and load the CERES HDF files	1. Type "matlabroot" at Matlab command prompt and copy the path. ◦ This directory will be referred to as $matlabroot 2. Quit Matlab 3. Go to "$matlabroot/toolbox/matlab/imagesci/private" 4. Make a backup copy of the file hdfquickinfo.m to hdfquickinfo.m.old 5. Copy the new hdfquickinfo.m file into the same directory 6. Restart Matlab 7. Type "rehash toolboxcache" at Matlab command prompt. **The changes are not going to be effective without doing this.** 8. Start hdftool and load the CERES HDF files

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Workaround for Customers using MATLAB R2007b

Users may experience problems reading CERES (specifically, FLASHFLUX) data files with MATLAB. The problem with reading CERES data files is a bug in MATLAB R2007b that has been fixed in R2008a. This issue, which arises only with certain HDF files, is related to a bug in the HDFREAD function that cannot read a 'Vdata' dataset that is contained in a 'Vgroup'.

- At the MATLAB prompt:
    - Type the matlabroot command
    - Record the directory name returned
    - This directory will be referred to as ${MATLABROOT} in following steps
- Quit MATLAB
- Change directories into ${MATLABROOT}/toolbox/matlab/imagesci/private
- Make a backup copy of the file "hdfquickinfo.m" by copying it to "hdfquickinfo.m.old"
- Download the new hdfquickinfo.m file and store it in the current directory
- Restart MATLAB